

**In the Claims**

Please amend the claims as follows.

1. (Currently amended) An antiserum ~~or an antibody or fragment thereof~~ that recognizes Fibrinopeptide B (FPB) peptides and/or des-arginine Fibrinopeptide B (des-arginine FPB) peptides comprising amino acid sequence SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 or SEQ ID NO:6, wherein ~~a~~ the ratio of IC<sub>50</sub> of fibrinogen to IC<sub>50</sub> of FPB for said antiserum, ~~or antibody or fragment thereof~~ is at least 0.34.

Claim 2 (Canceled).

3. (Currently amended) The antiserum ~~antibody or fragment thereof~~ according to claim 1, wherein antibodies of the antiserum are ~~the antibody or fragment thereof~~ is attached to a substrate.
4. (Currently amended) The antiserum ~~antibody or fragment thereof~~ according to claim 3, wherein the substrate is a gel, hydrogel, resin, bead, nitrocellulose, nylon filter, microtiter plate, culture flask, or polymeric material.
5. (Currently amended) The antiserum ~~antibody or fragment thereof~~ of claim 1, further comprising a detectable moiety.
6. (Currently amended) The antiserum ~~antibody or fragment thereof~~ of claim 5, wherein the detectable moiety is a radionuclide, enzyme, specific binding pair component, colloidal dye substance, fluorochrome, chemiluminescent substance, electrochemiluminescent substance, electroactive agent, reducing substance, latex, digoxigenin, metal, particulate, dansyl lysine, antibody, protein A, protein G, electron dense material, or chromophore.

Claims 7-10 (Canceled).

11. (Currently amended) A diagnostic method for detecting thrombotic or thromboembolic disease in a patient comprising:
  - (a) contacting a physiological sample suspected of containing fibrinopeptide B (FPB) peptide and/or des-arginine FPB peptide with an amount of detection agent specific for FPB and/or des-arginine FPB peptides to form an FPB:detection agent complex, wherein the detection agent is the antiserum, ~~antibody or fragment thereof~~ of claim 1; and
  - (b) detecting a presence of FPB and/or des-arginine FPB:detection agent complex present in the sample to determine whether the patient has thrombotic or thromboembolic disease.
12. (Original) The diagnostic method of claim 11, further comprising removing fibrinogen from the physiological sample.
13. (Original) The diagnostic method of claim 11, wherein the thrombotic or thromboembolic disease is a deep venous thrombosis (DVT) or a pulmonary embolism (PE).
14. (Original) The method of claim 11 wherein the physiological sample is a fluid.
15. (Original) The method of claim 14 wherein the fluid is blood plasma.
16. (Original) The method of claim 15 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 5 ng/ml is reported as indicative of thrombotic or thromboembolic disease.
17. (Original) The method of claim 15 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 10 ng/ml is reported as indicative of thrombotic or thromboembolic disease.

18. (Original) The method of claim 14 wherein the fluid is urine.
19. (Original) The method of claim 18 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 50 ng/ml is reported as indicative of thrombotic or thromboembolic disease.
20. (Original) The method of claim 18 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 100 ng/ml is reported as indicative of thrombotic or thromboembolic disease.

Claim 21 ( Canceled).

22. (Currently amended) The method of claim 11, wherein antibodies of the antiserum are ~~the antibody or fragment thereof~~ is attached to a substrate.
23. (Original) The method of claim 22, wherein the substrate is a gel, hydrogel, resin, bead, nitrocellulose, nylon filter, microtiter plate, culture flask, or polymeric material.
24. (Currently ameded) The method of claim 11, wherein antibodies of the antiserum comprise ~~antibody or fragment thereof~~ further comprises a detectable moiety.
25. (Original) The method of claim 24, wherein the detectable moiety is a radionuclide, enzyme, specific binding pair component, colloidal dye substance, fluorochrome, reducing substance, chemiluminescent substance, electrochemiluminescent substance, electroactive substance, latex, digoxigenin, metal, particulate, dansyl lysine, antibody, protein A, protein G, electron dense material, or chromophore.
26. (Previously Presented) The method according to claim 11, wherein the detection step (b) is by enzyme-linked immunosorbent assay, immunonephelometry, agglutination,

precipitation, immunodiffusion, immunoelectrophoresis, immunofluorescence, electrochemiluminescence, surface plasmon resonance, chemiluminescence, electrochemical immunoassay, radioimmunoassay, or immunohistochemistry.

Claims 27-28 (Canceled).

29. (Currently amended) A method for monitoring treatment of thrombotic or thromboembolic disease caused by a thrombosis or embolism in a patient comprising:
- (a) contacting a physiological sample suspected of containing fibrinopeptide B (FPB) peptide and/or des-arginine FPB peptide with an amount of detection agent specific for FPB and/or des-arginine FPB peptides to form an FPB:detection agent complex, wherein the detection agent is the antiserum, ~~antibody or fragment thereof~~ of claim 1;
  - (b) detecting ~~an~~ the amount of FPB and/or des-arginine FPB or ~~an~~ the amount of FPB:detection agent complex in the sample;
  - (c) repeating steps (a) and (b) at a point later in time; and
  - (d) comparing the amounts determined in steps (b) and (c), and correlating the change in the amounts to determine whether the thrombosis or embolism is diminishing in size.
30. (Original) The monitoring method of claim 29, further comprising removing fibrinogen from the physiological sample.

Claims 31-48 (Canceled).

49. (Currently amended) The antiserum, ~~or antibody or fragment thereof~~ of claim 1, wherein the ratio of  $IC_{50}$  of fibrinogen to  $IC_{50}$  of FPB for said antiserum, ~~or antibody or fragment thereof~~ is about 0.5.

50. (Currently amended) The antiserum, ~~or antibody or fragment thereof~~ of claim 1, wherein said antiserum, ~~or antibody or fragment thereof~~ does not cross react with fibrinogen.
51. (Currently amended) The antiserum, ~~or antibody or fragment thereof~~ of claim 1 which cross-reacts with both FPB and des-arginine FPB.
52. (Currently amended) The antiserum, ~~or antibody or fragment thereof~~ of claim 51, wherein a ~~the~~ ratio of  $IC_{50}$  of des-arginine FPB to  $IC_{50}$  of FPB for said antiserum, ~~or antibody or fragment thereof~~ is about 0.75.